

ABSTRACT

The method for maximizing data throughput for cellular communications is disclosed. The invention is based upon the fact that each base station of a cell has a finite amount of transmit power and that mobile devices in different locations require transmission from the base station having varying amounts of RF signal power. The method efficiently distributes the signal power of the base station using the speed, location, and direction of the mobile device as control parameters, so more mobile devices can be serviced with increased overall system throughput.

10 Moreover, a particular mobile device can receive signals transmitted with more than the required RF signal power, with respect to the mobile device's signal to interference ratio, to increase the data throughput of that mobile device.